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FOREST INSECT INVESTIGATIONS

MEMORANDUM FOR FOREST SUPERVISOR,
CLEARWATER NATIONAL FOREST

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September 18, 1930.

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Forest Insect Field Station, Coeur d'Alene, Idaho, September 18, 1930.

MEMORANDUM FOR FOREST SUPERVISOR, CLEARWATER NATIONAL FOREST

He - Musselshell Insect Control Project.

Under date of September 6, 1930, the writer, accompanied by alternate Ranger Armstrong, made an extensive examination of the Musselshell insect control project which was instituted in the spring of 1930. It will be remembered that this outbreak had its inception in a rather severe blow-down of white pine which occurred in 1927. The purpose of this examination was to inspect the actual spotting and treating of the infested trees and to secure a first-hand impression of the results secured. Though the time available for this examination was limited, it is believed that a very fair sample of the control area was covered, and that the reaction secured was indicative of what would have been found had a more thorough survey of the region been possible.

The spotting was found to have been very thorough as no 1929 attacked trees were found that had been missed by the spotters. This is the first and most important step of a control project and when well performed has a great deal to do towards securing successful results. The actual control work had also been carried on in a very thorough manner. The infested tops, under sides of logs, stumps, etc., had all been thoroughly and carefully peeled, which, with the careful spotting, would seem to indicate a successful project, unless reinfestation from adjacent areas was to be contended with.

A trifle over five miles of sample strip were run through the sections where the heaviest infestation was found during the project. Mr. Armstrong ran the compass and paced the distances covered, while the writer devoted his entire efforts to the location of infested trees on a strip one chain in width. The data secured from this strip were not entirely fair as the sample taken was not run on a direct compass bearing, but the course changed whenever desired to touch as many groups of green white pine as possible. Furthermore, many trees were examined that were outside the boundaries of the one-chain strip. These factors would, of course, give an inflated value to the results secured from the examination. However, the data secured from this strip were more than gratifying as only one 1930 attacked tree was located. This does not mean that there are no infested trees within the region as the more intensive survey that is to be conducted by forest officers later in the season will undoubtedly reveal from 25-50 newly attacked trees within the areas covered It would seem that this project can be considered by control in 1930. eminently successful in having reduced what appeared to be the inception of a serious outbreak of the mountain pine beetle that during the next three or four years would not only have destroyed a large per cent of the pine in the Musselshell region, but would have spread into uninfested timber stands adjacent.

It would seem that if at all possible the intensive survey should be made as soon as possible and if the writer's reaction to the conditions within this area proves to be correct then it would be well to plan for the treatment of the 1930 attacked trees by felling, piling, and burning, this fall. Such action would eliminate the serious difficulties encountered last spring from bad roads, etc. Inasmich as the area concerned is a relatively small one, and that the infestation will be lightly scattered throughout, it will be necessary that at least 5 per cent or more of the area be covered by this survey. With infestations of this character a survey of this intensity is necessary if accurate data are to be secured. Such a percentage would require that a sample strip one chain in width be run through a section at least four times. As the area is small a survey of this intensity could be conducted for a few dollars. Should the data obtained reveal a sufficient number of trees to justify the institution of control then it is believed that the trees could be treated this fall by a combination spotting and treating crew that can be subsequently planned.

Respectfully submitted.

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